U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION 5

IN THE MATTER OF THE) OTTAWA RADIATION) NPL-11 SUPERFUND SITE)

REPORT OF PROCEEDINGS had of the

PUBLIC MEETING held on the 19th day of May, 2010, at

6:30 p.m. at the Ottawa City Hall, 301 W. Madison

Street, Ottawa, Illinois, County of LaSalle.

1 Thank everybody for coming. MS. ALLEN: Mv 2 name is Cheryl Allen. I'm the Community Involvement 3 Coordinator with USEPA, and I'll be facilitating 4 tonight's meeting. Everybody got a packet of 5 information which explains the agenda. The fact sheet 6 is with this packet. The presentation is also there, 7 and an information contact is in case you have any 8 questions later on.

9 We're going to jump right in and 10 start with the presentations. To give you an idea of 11 how the meeting is going to proceed is that we'll have 12 two presenters, and at the end of their two 13 presentations what we'll do is we'll have a Q and A 14 session, and then we'll probably not break for five 15 minutes because there's not that many people here. 16 We'll swing right into the public comment period, and 17 at that time we ask if you have any comments that you 18 state your name and spell it for the court reporter. 19 She'll be recording the whole meeting. And during the 20 comment period we can't respond to any of your 21 comments. So the Q and A question part is the part 22 where we can answer your questions. So with that I'll 23 hand it over to Denise, and we'll get started.

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1 MS. BOONE: Good evening. My name is Denise 2 Boone, and I am the project manager for the Ottawa 3 radiation site. We're here tonight to present EPA's 4 proposed change to the cleanup plan for NPL-11 site. 5 NPL-11 site is -- basically consists of two vacant 6 properties on Bellevue Avenue. As Cheryl said, we'll 7 start with the presentation. I will give the majority of the presentation, and then Keith -- Dr. Keith 8 9 Fusinski, our health expert from our Detroit office, 10 will present the human health risk assessment portion 11 of the project, and then I'll come back and talk about 12 the alternatives. And as we said, we'll go into the Q 13 and A and then after that the public comment period. 14 In 2003 EPA had a meeting very 15 similar to this where we came out to the public and 16 proposed a cleanup plan for the NPL-11 site, and at 17 that time in 2003 we also -- we selected the cleanup 18 which was going to cost about \$200,000 and would be an 19 excavation cleanup where we would excavate contaminated 20 soil to remove radium above the 6.2 picocuries per 21 Also, as part of that we knew we were going to gram. 22 have to deal with water so we were going to dewater the 23 system, collect the water, put it into a treatment

1 system, and then discharge it. As part of that also 2 included volume reduction. Volume reduction is 3 basically a separation technique because you have clean 4 and soil kind of mixed in together, and what we would 5 do was we would separate the clean from the soil --6 from the dirty, and then the very highly contaminated 7 soil would go to a licensed radioactive facility type 8 of landfill and the other soil could go to a special 9 waste landfill, a local special waste landfill. 10 Why the change? What changed from 11 2003? Well, we took some -- we did some additional 12 sampling, and we found that the ground water table is a 13 lot higher than what we saw when we did our initial 14 investigation in 2003. We found that -- we found more 15 small spots of contamination. Something about the 16 contamination here in Ottawa is that you don't find 17 like a large amount together. There's a spot here, a 18 spot here, a spot there. And all of these factors made 19 our area of excavation larger than what we initially 20 expected, which was going to make the excavation more 21 difficult to implement and we were going to see a 22 significant cost increase where we were going to go 23 from \$200,000 to just under \$5,000,000.

1 EPA evaluated four alternatives for 2 cleanup, and from that we recommend the institutional 3 control deed restriction. What this would mean is that 4 we would leave waste in place but we will put deed 5 restrictions on the property so the deed restriction 6 would include prohibiting soil excavation below the 7 ground water table unless approved by EPA or the --8 and/or the Illinois Emergency Management Agency. If by 9 some chance the excavation -- it would be needed at the 10 site, the soil would be disposed of in accordance with 11 regulations. 12 We would prohibit the use of ground 13 water basically meaning that no one could put in a well 14 at the property even though the City does have 15 ordinance prohibiting that, but we want to be sure that 16 that doesn't happen. 17 We would allow for the construction 18 of a building -- a slab-type building but it must have 19 a radon reduction system. 20 And then, lastly, we will review the 21 site every five years to be sure that it is still 22 protected. To give a little history before I get into 23 the main part of the presentation, there are a total of

16 areas or sub-areas in the Ottawa radiation sites.
2 These sites became contaminated from two Ottawa
3 companies that used radium sulfate paint in the making
4 of glow-in-the-dark watches. These companies operated
5 between 1920 and 1978, and, of course, they no longer
6 exist.

7 Here is a map showing these 16 areas. 8 All of the areas in red are the sites that we have 9 cleaned up. The ones in blue are the ones that are 10 scheduled for cleanup or we have done some partial 11 cleanup. Our site of interest tonight, NPL-11, which 12 is on the north side of town right here on Bellevue 13 Avenue, NPL-1 -- that is the property down by the 14 Marquette High School athletic field, and we have done 15 several cleanups down there but we found some 16 additional contamination which we are evaluating at 17 this time. One of the largest sites, NPL-4, which is 18 two properties out on Canal Road. And then the very 19 last property -- the largest property will be the last 20 to be cleaned up is the landfill and also the private 21 property in front of that and that's out on Route 71 22 and Route 6. EPA conducted removal in Ottawa at 12 of 23 the 16 sites. We removed about 40 tons of contaminated

1 soil back in the mid-nineties. Just to kind of explain 2 this word removal, the superfund program falls into two 3 categories, a removal program and a remedial program. 4 Our removal program is more of a --5 it's an emergency response of eminent threat. So when 6 they did the removals out at these 12 sites, it was to 7 residential areas because people were living in their 8 houses. 9 The NPL-11 site, we did a removal 10 there also, but it was not completed. We removed about 11 over 4,000 tons of contaminated radium soil from that 12 site, but it wasn't completed because of ground water. 13 During the excavation process the excavation was 14 inundated with water and that really made it very 15 difficult to remove the contaminated soil from there. 16 So what they did was they removed as much soil as they 17 could and they did verification sampling and the 18 verification sampling showed that they still had 19 contamination. So they put about five or six feet of 20 clean soil on the site and it -- and that site moved 21 into our remedial program, the program I'm in where 22 it's more of a long-term program where we don't have an 23 eminent threat and we kind of take our time and try to

7

¹ figure out a cleanup for the site.

2 Here's a map showing NPL-11 site. It 3 basically consists of three parcels, one, two, and 4 three, and this was during the removal. This house 5 right here was completely cleaned up during the 6 removal. These two properties here where they're 7 vacant lots now were not. As a matter of fact, this 8 middle home -- this middle lot here there was a home 9 here and that home was moved to this property right 10 here. 11 Here I'll show you a couple of 12 This is a photo showing the verification photos. 13 survey under the home that they cleaned up under, and 14 this was in about 1996. This is a photo showing the 15 water and the excavation, kind of giving you an idea of 16 how much water they were dealing with. At that time 17 they did have a system to pump off the water -- to pump 18 the water, but the system could not keep up with the 19 amount of water going into the excavation. EPA 20 conducted two investigations out here. The first 21 investigation was conducted in 2000 and this was the 22 investigation that we used the data to make the 23 decision for the 2003 Record of Decision. Before

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1 preparing to go out and actually do the cleanup, we did 2 some additional sampling, and that's where we have the new -- that's where the new data comes from. 3 4 Investigation results. In 2000 we 5 took 24 samples and we only had one sample that 6 exceeded the cleanup goal which was the 6.2 picocuries 7 per gram. That sample -- the one sample was at about 8 six to eight feet and the concentration was 19.5 9 picocuries per gram, and we saw ground water at that 10 time at a depth of about seven to ten feet. And we 11 estimated that the amount of the volume of 12 radium-contaminated soil that needed to be excavated 13 was 74 cubic yards. So if you look at this, you see 14 that where the contamination -- where we found 15 contamination and where the ground water table was, and 16 this is below the ground surface. So we knew that we were going to have to use some type of pump in order to 17 18 pump the water out so that we could get to that soil. 19 When we did our sampling in 2006, 20 here again, we took 22 samples, and we only had three 21 exceedances (phonetic). It's like I was telling you 22 before that we don't see the contamination in like 23 It's a spot here, a spot here, a spot large amounts.

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1 It's very discrete. In these three samples the there. 2 contamination was found between 18 and 13 feet, and you 3 see the concentrations are not that different from what 4 we saw before, but now the ground water depth was at 4 5 to 6 feet. So that's a lot higher than what we saw 6 previously which tells us it's going to be a lot more 7 difficult to get to that contamination. And we 8 increased the estimation of the cubic yards to over 600 -- 6,000 cubic yards. 9

10 Also, during this investigation in 11 2006 we put in temporary wells, and they're basically 12 -- we basically just put a pipe in the ground because 13 what we wanted to do was we wanted to get ground water 14 level measurements, and we also wanted to pull some 15 water from here to run it through a treatment system so 16 we could design a treatment system because our plan was 17 to -- when we pump the water, we would pump it to the 18 treatment system and then discharge it to the City of 19 Ottawa sewer. So since we -- that was the extent of 20 our ground water investigation. In the future what we 21 plan to do is we plan to do an actual ground water 22 investigation and determine if any type of response 23 action is needed.

1 EPA evaluated four alternatives for 2 the cleanup for the site. The no action with \$0 -- and 3 that's basically where we would not do anything, and 4 that's something we always put in there. And that is 5 not chosen all the time, but it's something we put in 6 there as a baseline. 7 Alternative 2, dewatering, continuous 8 pumping, soil excavation, volume reduction, and 9 off-site disposal at a cost of about 4.9 million 10 dollars. And this is basically the cleanup plan that 11 we had chosen before, the 2003 cleanup plan where we 12 would pump the water out, treat it, excavate the soil, 13 do a separation, and then dispose of it properly. 14 Alternative 3 is also a soil 15 excavation cleanup, but the difference here is that we would need to install some type of vertical barrier. 16 17 Because if we were to implement Alternative 2, we would 18 have water coming in from the sides and from the bottom 19 so it would be total wet excavation. We would have to 20 run the pumps 24 hours 7 days a week at a very high 21 rate, which would be very disruptive to the 22 neighborhood and the two homes there. Those neighbors 23 would not be able to live in their homes if we were to

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¹ actually implement that particular cleanup.

2 Alternative 2 -- Alternative 3 is a 3 little bit better because here you have to put in a 4 vertical barrier, and that vertical barrier could be a 5 slurry wall or a sheet pylon where -- I put some --6 there's a couple of photos up here that kind of give 7 you an idea of what would be involved if you were to 8 install a slurry wall. And, basically, you would be 9 building an underground concrete type clay type wall 10 around the perimeter of the site, and what this would 11 do is that it should slow the amount of water going 12 into the excavation from the sides, but your problem is 13 that you can still get water coming in from the bottom 14 of the excavation. So, here again, you need to run the 15 pump 7 days a week 24 hours, still very disruptive, 16 especially when you look at the type of machine that 17 you would need to actually construct this slurry wall. 18 So there's still -- here there's still a problem. Tt. 19 still would not be easy to implement the Alternative 3 either, and that's at a cost of about 4.8 million 20 21 dollars. 22 As I said before, EPA's recommended 23 alternative, which is Alternative 4, institutional

1 control, would be at a cost of just over \$200,000. And 2 I'll have to say this right now that it's EPA's 3 recommended alternative, but we have this public 4 comment because we want the public's input. The last 5 time I did this meeting in 2003 we changed the cleanup 6 plan a little bit because of the public comment. The 7 citizens -- we had two alternatives for treating the 8 water. We were either going to treat the water and 9 discharge it to the creek right behind the property or 10 we could treat it and discharge to the city sewer, and 11 they preferred that it go to the city sewer because I 12 quess the kids are out there playing in the creek 13 sometimes. So we do change our cleanup plan based on 14 what the public says. 15 So, again, what we recommend is that

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16 we will prohibit soil excavation below the ground water 17 table unless approved by EPA and/or Illinois Emergency 18 Management Agency. And if by some chance you need to 19 excavate the soil, it has to be done in accordance with 20 regulations. Prohibit use of ground water. We would 21 allow for the construction of a building but it must 22 have a radon reduction system and it must be a 23 slab-type building, and we will review the site every

¹ five years.

Whenever EPA is making a decision --2 3 a cleanup decision, we always do a risk assessment, and 4 the human health risk assessment will be given by 5 Dr. Keith Fusinski, but I just want to talk a moment 6 about the ecological risk assessment. We did not -- we 7 did a screening -- ecol. screening. We did not do a 8 full risk assessment because of it's the type of a site 9 where we really don't have a habitat for animals. It's 10 highly developed, and it's a very small site. But just 11 so that you know that we did do -- we did do an ecol. 12 risk assessment on the larger sites like at NPL-8, the 13 large landfill, because you have a lot of animals. You 14 have a -- you have some habitats out there. Keith? 15 MR. FUSINSKI: Okay. So I'm here to talk about 16 the human health aspects of these alternatives, but in 17 order to do that I need to do a few things first. Next 18 I'll give a little bit of background on slide. 19 radiation including the two radionuclides we have here, 20 radium and radon, giving you the EPA's definition of 21 risk, tell you what the current risk of the property is 22 right now and what the risk will be after the proposed 23 alternatives.

1 So radium and radon are both what's 2 known as alpha emitters. What this is, all alpha 3 nuclides, what they are are very active molecules and 4 what they want to do is they want to become stable. In 5 order to do that they eject what's called either an 6 alpha particle, a beta particle, a neutron, or a gamma 7 ray. 8 Alpha particles are relatively large, 9 basically equivalent to a helium nucleus. They cannot 10 penetrate the skin. In fact, this picture here shows 11 they're stopped by a piece of paper. So from outside 12 your body they really don't hurt you, but if you ingest 13 them or you inhale them, they can release a large 14 amount of energy in a localized area within your body. 15 Beta particles are just electrons. 16 We won't talk about those. Along with alpha and beta 17 comes gamma and x-rays. You're more familiar with 18 X-rays will go completely through your body. x-rays. 19 They release energy as they do this, and when you go to 20 the dentist and you get x-rays done on your teeth what 21 do they put over you? A lead shield. Lead will stop 22 Neutrons we won't talk about. x-rays.

So alpha, they're okay on the outside

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23

1 of your body but you don't want to take them in. Gamma 2 rays will go right through you and release energy. 3 Next slide. So Uranium 238 is a 4 highly reactive -- or a highly-active radionuclide and 5 what it does is it goes through a series of steps 6 releasing either an alpha particle, beta particle, and 7 gamma particle -- gamma rays will just go through. And 8 in this cascade of it becoming lead it actually becomes 9 Radium 226 and Radon 222, which are found here. 10 Next slide. These are both alpha 11 emitters with some gamma. Radium has a half-life of 12 Radon has a half-life of 3.8 days. 1,600 years. What 13 this means is if I have a gram of radium or a pound of 14 radium or a semi-truck full of radium and I measured 15 the radioactive activity on it, it's going to give me a 16 number. If I wait 1,600 years, that number would 17 decrease by half. If I wait by 1,600 years, that 18 number will decrease by half. So this is what's known 19 as by half-life, and this is how we say how active 20 something is. 21 Next slide. So radium is widespread. 22 It's naturally-occurring. This one I already told you 23 Radium has a unique about twice now. Next one.

1 It likes to play with calcium. So calcium is feature. 2 found in your bones. As you ingest radium, it likes to 3 hang out in your bones, and it will get there quite 4 fast and it will stay there. Unlike calcium, it's not 5 easily released from your bones. 6 Next slide. So as people are 7 chronically eating this stuff over the years it's going 8 into the bones but it's not coming out really easily. 9 Radon, on the other hand, is a gas. So you breathe the 10 stuff in. I already said that. The next one. So 11 because it is a gas you inhale it. Radon -- and 12 there's a bunch of decay products of radon that are 13 very short-lived, and what they do is they can attach 14 to dust particles, and if they attach to dust 15 particles, they like to hang out in your upper 16 respiratory tract. If they're not attached to dust 17 particles, they go to the lower respiratory tract. 18 Some people are very concerned about that. I'm not and 19 I will tell you why in a minute. Next. So radium 20 likes to go in your bones so what it likes to do is 21 cause bone cancer. Radon goes in your lungs and it 22 likes to cause lung cancer. Now, it doesn't -- I've 23 never heard anyone tell me that they have upper

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1 respiratory tract lung cancer or lower. That's why it 2 doesn't matter. Lung cancer to me is lung cancer. 3 Radon causes lung cancer. 4 That's the two nuclides of interest. 5 That's what they cause. That's how long they stay 6 here. I'm not going to talk about them right now. 7 Next slide. 8 The next question is what is risk. 9 There's many different answers to this. For me as a 10 risk assessor it's an equation. It is toxicity times 11 exposure. It can be in the toxicity of the chemical of 12 interest or the radionuclide of the biological agent. 13 It's toxicity of that, and it's very well-studied. 14 Many different scientists do lots of research on this 15 and develop this is the toxicity of this chemical. 16 The hard one is exposure. Next 17 What I need to know to do my job is how people slide. 18 are exposed. Now, radium will hurt you if it's 19 ingested. Radon will hurt you if it's inhaled. I need 20 to know if people are eating the stuff, if they're 21 inhaling the stuff, or if they're just playing in the 22 dirt. Next slide. The other thing that goes with this 23 is how are they exposed, how long are they playing in

1 the dirt, what is the concentration of stuff in the 2 dirt, and who's playing in the dirt. Are we talking 3 healthy construction workers that work an eight-hour 4 day in it or is this an elderly grandparent playing 5 with their grandchild in the contaminated dirt? These 6 are things that I need to know in order to do my job. 7 So for this site to say who is at 8 risk what we did is we looked at everybody who could 9 possibly be exposed with this site. I looked at the 10 residential people, residential, people who could 11 actually -- let's say, there's a house built on this 12 site as is. How will they be exposed? Do they eat the 13 dirt? Do they inhale the stuff? Do they touch it, and can they inhale it? We look at trespassers, people 14 15 just walking across the site. Commercial/industrial. 16 There's the site, there's a house, and then there's a 17 plumbing supply place. So it's not out of the question 18 for someone to buy this property and build a store. So 19 we have to look at the commercial/industrial, people 20 working inside, people working outside. What if they 21 build a nursery there. You know, they're outside 22 playing with the plants and all that all day. 23 I was talking to a homeowner earlier Recreational.

1 today, and they said that a young couple -- actually, 2 the male came up and asked, hey, can we have a picnic 3 in the back of your property so I can propose to my 4 girlfriend. It's a beautiful property. Okay. They 5 did it, and she said yes. So this is not out of the 6 question. And construction workers while they're 7 building a house or they're building a -- working on 8 utilities or they're just building a store, they can be 9 exposed. And we look at how these different factors --10 how these different people can be exposed. 11 Next slide. It's a lot of words. 12 Don't read it. I'll tell you what it says. USEPA 13 looks at risk in two different ways, cancer and 14 non-cancer. For radionuclides we're concerned with 15 We recommend a one in a million cancer risk. cancer. 16 What this means, if you take this property, NPL-11, and 17 put one million people on this site for an average of 18 70 years, if it's possible for one of them to get 19 cancer from the contaminants in the soil, we recommend 20 that risk. It's a possibility of one person out of a

million. Not that one person will, but there's a 22 probability that they could. We will accept one in a 23 hundred thousand to one in a million. We may accept

21

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1 one in ten thousand. We normally don't accept anything 2 greater than that risk. And, like I said, this is a 3 possibility of someone getting cancer from being 4 exposed. We're not saying someone will get cancer, but 5 it's a possibility of a probability. 6 Next slide. To make this easier to 7 understand, I color-coded it. For one in a million 8 risk it's green. For one in a hundred thousand risk 9 it's yellow. For one in ten thousand, which is 10 unacceptable but EPA may accept it depending on the

circumstances, it's orange, and for one in a thousand we put red.

13 Okay. No one can read this, but it's 14 residential land use, trespasser, commercial indoor, 15 outdoor, recreational, construction worker. So I put 16 the colors in here so you can understand it. This is 17 background. This is what it is in the general area of 18 Ottawa right now for everybody here. So for a 19 construction worker it's three in ten million. So 20 that's green. That's green. This is green and yellow. 21 It's somewhere in between perfect and acceptable. 22 Yellow, yellow, green, red. This is background. This 23 is 1.2 picocuries per gram of radiation found in the

1 For residential people this is the risk. It is area. 2 a probability of one in a thousand people actually 3 contracting cancer through the contamination there. 4 Next slide. Alternative 1, no 5 It's basically the same. Once again, this is action. 6 due to the background. Alternative 2, we got rid of 7 the current people and just looking at future now. 8 Still not much has changed. This is still due to 9 background because whether we dig up the dirt and get 10 rid of it and do all the treatment that Denise told you 11 about the background is still there. Alternative 4, if 12 you build a building and put in a radon reduction 13 system, that risk goes down. It's not perfect. It's 14 six in ten thousand, but it's no longer at the risk of 15 background as long as they have the radon reduction 16 system. 17 So this is why -- one of the reasons 18 we recommend Alternative 4 because of all the 19 alternatives we have this is the one that lowers the 20 risk the most. And with that I give it back to Denise. 21 MS. BOONE: Let's get back to the alternatives. 22 Whenever EPA chooses -- is looking at trying to choose 23 a cleanup plan for a site, we look at, you know, what

¹ data we collected, we look at the risk assessment that ² Keith just talked about, and we look at the present and ³ future land use.

And the four alternatives were 4 5 compared to nine criteria. This table pretty much lays 6 it out where our recommended alternative is Alternative 7 4 where it is -- it is protective of overall human 8 health in the environment. It is in compliance with 9 federal and state regulations. It has the long-term effectiveness and short-term effectiveness. 10 It is 11 easier to implement than Alternatives 2 and 3, and it's 12 less expensive than Alternatives 2 and 3. The only 13 thing that it does not meet the criteria for is right 14 here, reduction of toxicity, mobility, or volume 15 through treatment, and none of them do, and that's 16 because of the nature of the radium-contaminated soil. 17 It can't be treated to reduce it. You actually have to 18 physically move it somewhere to a landfill or something 19 like that. And the only two criteria that we don't 20 have here that we're waiting for -- we're waiting for 21 state acceptance. The Illinois Emergency Management 22 Agency has already given us preliminary concurrence 23 with Alternative 4, and tonight and through the public

1 comment period we would like your input into our 2 recommendation of Alternative 4. And I'll just repeat what Alternative 4 is again. It would be institutional 3 controls in the form of deed restriction where we will 4 5 prohibit excavation of soil. If soil is excavated, it 6 must be disposed of appropriately. Prohibit use of 7 ground water. Prohibit construction of building 8 without radon reduction system. And we would conduct a 9 final review every five years. 10 And I have to say here that with this 11 it's not like we're going to go away and come back 12 every five years. We'll be working with the City to 13 monitor to make sure if something is going to be 14 constructed on the property that they have to get a 15 building permit, or something, and the State would also 16 help us to enforce the deed restriction. And in 2011 17 we plan to do a ground water study out at this site, 18 and if we find contamination, it's very possible that 19 we would have to have another proposed meeting very 20 similar to the one tonight. 21 MS. ALLEN: Okay. So what's next? The comment

²³ want your input tonight, and there are a couple of ways

period concludes on June 11, and like Denise said we

22

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1 that you can submit your comments. There's a web site. 2 I think it's on -- what is the -- one of the next 3 slides. Go one more. There's a web site here that you 4 can submit your comments. You can either fax them to 5 me at that number right there, 312-408-2234, or you can 6 e-mail your comments to me. After all the comments are 7 compiled and collected, what we put together is called 8 a responsiveness summary, and that's basically just 9 answering all the questions and addressing all the 10 comments that you have about the alternatives. And 11 like we have been saying tonight, that public input is 12 very important to us. So if -- you know, if we get 13 something that drastically, you know, changes or has 14 impact on the alternative or people are not very happy 15 with Alternative 4, we consider that. So, I, guess any 16 questions?

MR. BANDSTRA: Could you review again what the \$210,000 cost is for the recommended alternative? What does it cover?

MS. BOONE: It covers the actual implementation of the deed restriction, the legal having to do with the legal fees and things to pay for that. It also includes us coming out for 30 years and doing five-year

26 1 reviews and also includes the maintenance of a radon 2 reduction system for a building. 3 MR. BANDSTRA: So that includes bringing future 4 costs like today assuming that we're going to be doing 5 every five years the testing? 6 MS. BOONE: Right, uh-huh. 7 MR. BANDSTRA: Have you thought of an 8 alternative by which EPA just purchases the lot and 9 does away with -- you know, you own it, and nothing can 10 be done with it. 11 Mr. FELITTI: You are not legally able to do 12 that. Under the statute EPA cannot own the property. 13 MR. BANDSTRA: They can't. Okay. 14 MS. BOONE: I think we're going to have to do a 15 couple of introductions here. This is Peter Felitti. 16 He's the attorney for the site. And right here is Tim 17 Runyon. He's with the Illinois Emergency Management 18 Agency sitting right here, and behind the computer is 19 Doyle Wilson. He's with the Illinois Environmental 20 Protection Agency. So any of us may answer the 21 question. 22 Okay. So currently the site is MR. BANDSTRA: 23 owned by individuals; is that right?

MS. BOONE: Correct.

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2 MR. BANDSTRA: Okay. And so it is not an 3 option for EPA to purchase the site and just be done 4 with it? That's just not in the law? MR. FELITTI: Well, I mean, the only thing we 5 6 could do is we would have to purchase it and then we 7 would have to give it to somebody else. We cannot hold 8 on to the property. So we would have to transfer it to 9 the State probably or the City if we did that. 10 MR. BANDSTRA: Is that an option? 11 It is a very rare option done on MR. FELITTI: 12 eminent domain where we would condemn the property. Ι 13 am not aware of any site where that has actually been 14 done. 15 Is there a value that -- I mean, MR. BANDSTRA: 16 if somebody looked at that site to purchase it, it 17 can't be worth much especially with the -- I mean --18 MR. FELITTI: Actually, it can be --19 MR. BANDSTRA: The lot would cost \$20,000 --20 MR. RUNYON: I would probably argue that point 21 because, you know, any contamination that's there is 22 there at depth. You know, you do have some off-shoots 23 for that property, not all of it is impacted, and also

1 the reality is you wouldn't want to dig a basement 2 there anyway. If you were going to construct anything 3 there, it would have to be slab on grade to start with 4 since you're only four feet above the water table. So, you know, in terms of a deed restriction it's -- you 5 6 know, the term deed restriction sounds pretty ominous, 7 but for that particular parcel the deed restriction 8 doesn't have a tremendous impact. 9 MR. BANDSTRA: Right. 10 MR. RUNYON: Because you couldn't construct 11 another type of home there anyway or business or

¹² whatever.

MR. FELITTI: I mean, the main thing the restriction would require is putting in the radon system. Once you put that in actually your risk goes down for background. So we wouldn't be prohibiting the construction or use of the property.

¹⁸ MS. ALLEN: Any other questions?

MR. ANDREWS: There are houses pretty close to this property.

MS. ALLEN: Yes.

MR. ANDREWS: So what is the -- I mean, I just -- I don't exactly understand because there's a lot of

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1 radon properties -- I mean, there have been EPA sites 2 here before apparently and they removed a lot of 3 contaminated soil, and so I wonder like what's 4 different now? Is it just the costs have gone up? The 5 fact that the ground water level has gone up, has it 6 increased the cost of removal? Why is it -- I didn't 7 get a clear idea as to exactly why now it's not as 8 important to remove that contaminated soil as it was 9 back when everybody was like that was the thing to do. 10 Tim, do you want to address that? MS. BOONE: 11 I can probably talk about that a MR. RUNYON: 12 little bit. Ground water is a driving force there for 13 a couple of reasons. One, contamination below ground 14 water, you don't have the radon flux issue because it 15 doesn't move as fast. The contamination that exists 16 there below the ground water from our perspective is 17 pretty minimal to start with, you know, not something 18 that we would believe would be cost effective to try to 19 chase because in the end result, one, you can't ever 20 really be sure you got it all. You can't do 21 verification below ground water the way we could for a 22 dry site where we can go in at the bottom of the 23 excavation and say this is clean.

1 You do quarry or whatever you --MR. ANDREWS: 2 MR. RUNYON: Yeah, it's -- you know, to try to 3 even locate it, and to be honest with you, if we had 4 not attempted to do verification before the water kind 5 of filled everything up over there, nobody would even 6 know anything was there. Because, you know, we 7 intentionally got in to see if we could find anything, 8 and there was some -- you know, there was some residual 9 material there. It's -- it doesn't appear to be a cost 10 effective alternative to kind of excavate blind-folded 11 because it's all below the water table. It's really 12 expensive to try to deal with -- you know, come up with 13 an engineering design that allows you to remove the 14 water. And even then you're going to be dealing with, 15 you know, having to dry the material before you can 16 even move it or do something with it. And I think at 17 the end of the day what -- the residual amount of 18 material that is there because the radon is the driving 19 force to start with, you know, below that at that depth 20 you're not going to have any external exposure from 21 gamma anyway. It's strictly radon driving the risk. 22 You know, you're just not going to have that issue in 23 the same way that you would to build -- for example, if

there were no water there and you put a basement into it.

MR. ANDREWS: Does the depth or level of the radon -- I mean, I don't know how to know this unless you know how -- where it was dumped, but is it actually -- is it a deeper level now than it was when it was actually dumped?

8 MR. RUNYON: Probably not. The material is 9 probably at the same level. The water table has come 10 Obviously, last year was, what, the third wettest up. 11 year on record in Illinois. The water table is up, you 12 The odds of being able to track the water table know. 13 until it got down to the point where it was when that 14 was filled in -- and, you know, this is fill material 15 and, you know, we dealt with this fill issue all over 16 town. You know, when you have a -- when you have a 17 hole that you're filling in, it doesn't have to be dry 18 when you tip your truck into it, and I think that's 19 what happened in a lot of the situations was, you know, 20 they were filling in to reclaim wet areas. So they 21 were -- you know, they were wet to start with, but what 22 -- you know, I think what the practice was was, well, 23 we would like to get a little more useful space out of

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32 1 this so we're going to fill it in, and that's why the 2 materials are often in low-lying areas or areas that 3 are impacted by water. 4 MR. ANDREWS: What kind of a radius are you 5 talking about when you talk about people drilling wells 6 within a distance of a site like that? 7 MS. BOONE: It would just basically be on the 8 property itself. 9 MR. ANDREWS: So if the people next-door dug a 10 well, --11 The City is not going to allow MS. BOONE: 12 them--13 That's really a mute question in MR. RUNYON: 14 Ottawa since we have an ordinance that since we have an 15 ordinance that says you can't drill a well anyway. The 16 other problem is if you dug a well, it wouldn't matter 17 whether you dug it next-door or whether you dug it five 18 blocks away; it's probably going to have some radium in 19 it but it's going to be naturally-occurring radium and 20 it just gets really difficult to -- you know, because 21 we had to explain this many times over the years that, 22 you know, for example, the City well is 1,200 feet 23 The radium in the City well has nothing to do deep.

1 with wash tiles. It's just naturally-occurring radium. 2 So, you know, -- and I think we can go on record as, 3 you know, supporting the no action alternative. You 4 know, we think it's -- because it's not significantly different in anything except cost. You know, again, 5 6 it's not like there's -- there's any point in time at 7 least in the, you know, foreseeable future where you 8 could use that piece of property with the dug basement, you know, with all that sort of thing. So the fact 9 10 that it's -- you know, it sits there in that condition, 11 we don't see, you know, a slab on grade. You know, we 12 don't see the deed restriction as being a really big 13 impact so -- and, also, since there's no surface 14 contamination, we don't see it as an issue for anybody 15 who wanted to go have a picnic on it, you know. 16 MS. BOONE: No. It is safe for construction 17 workers, recreational, --18 MR. ANDREWS: What if a kid decides to play in 19 there and decide to eat dirt? 20 MR. RUNYON: He would have to eat his way down 21 a long way. 22 So it doesn't occur -- the MR. ANDREWS: 23 contamination level doesn't occur until a certain

¹ depth?

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MS. BOONE: Right, because we did removal already, and then they put about five or six feet of clean soil on top of that.

MR. FRANKLIN: He'd apparently have to eat and
 drink his way down there, I guess.

7 MR. RUNYON: So, you know, we're comfortable 8 with this, and we think it's a reasonable alternative. 9 And, you know, once you have removed the source that 10 was removed, even the other houses, you know, they're 11 not going to have indoor/outdoor problems other than 12 what they might have had naturally from anyplace else 13 in Illinois. It's not like -- you know, it's not like 14 radon is an issue in Ottawa and nowhere else. You 15 know, it's pretty broad -- it's pretty widespread in 16 Illinois in terms of the EPA levels.

MS. BOONE: Right. We may decide to go on and
just check the radon level in the two homes that are
adjacent to the property just to be sure.
MR. ANDREWS: Do they have basements?
MS. BOONE: Yes.
MR. RUNYON: But if you -- it doesn't show

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really well in that photo. I mean, you may already

¹ know this. It's pretty deep. There's a pretty good ² dropoff down into that area and where the houses are ³ it's built up probably, I'm going to say, six to eight ⁴ feet.

5 MS. BOONE: Yeah. The house on this side is 6 built up higher. This one is about at the same level, 7 but I talked with the homeowner today, and I guess when 8 -- in the reconstruction of his basement we built him a 9 second basement and it's about two feet, three feet 10 depth, the foundation of it. So his home is 11 well-protected. And prior to the actual removal there 12 was a radon reduction system in his home, and from 13 everything that I read that system was removed once the 14 excavation was completed.

MR. BANDSTRA: Maybe you said it and I missed it. In 2002 you did the main soil -- or, I'm sorry, 2000. In 2000 you did most of the soil removal. And then 2006 and 7 you came back. Did you do more soil removal? Did you dig down?

MS. BOONE: The removal was conducted in '95, '96. We did the investigation in 2000 to work toward the decision for the 2000 cleanup.

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MR. BANDSTRA: So in 2000 did you open up the

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1 hole--
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2 MS. BOONE: No.

3 MR. BANDSTRA: -- again or did you just do 4 probing? 5 MS. BOONE: We did like a probe, right. 6 MR. BANDSTRA: Okay. And 2006 and 7 you also 7 did probing; you didn't do open excavation? 8 MS. BOONE: Right. 9 MR. BANDSTRA: Okay. 10 MS. ALLEN: Any other questions? Okay. Ι 11 quess we'll move to comment portion. Any comments? No 12 comments? Okay. 13 MR. ANDREWS: Your suggestion that if it be 14 condemned and somebody purchase it so there would never 15 be any question again, it sounds like, I mean, -- it's interesting to me, but -- I mean, Ottawa -- I know this 16 17 happens a lot of places, but Ottawa has got a real 18 history with the --19 MS. ALLEN: Okay. Can I stop you a second? 20 MS. GLASSES: Sure. 21 MS. ALLEN: Is this a question or a comment 22 before we move on to comments? 23 It's a comment. I'm commenting MR. ANDREWS:

1 on --2 MS. ALLEN: Okay. The reason why I'm asking si 3 because I need you to state your name for the court 4 reporter so that she can take it down as an official 5 comment. 6 MR. ANDREWS: Okay. I'm Farley Andrews. 7 MS. ALLEN: Could you spell your last name for 8 her? 9 MR. ANDREWS: Andrews, A-N-D-R-E-W-S. 10 MS. ALLEN: Okay. Go ahead. 11 MR. ANDREWS: And I was just commenting that 12 his comment that -- about the possibility of someone 13 purchasing that land so that it could never be used in 14 a way that was, you know, incorrect or -- relate I did 15 both by the EPA and the city and the city is closer and 16 all of this seems like a good idea to me. That's my 17 comment. 18 MR. BANDSTRA: It would seem like it could 19 possibly be a lower cost alternative --20 MS. ALLEN: Is this a comment? 21 MR. BANDSTRA: I guess it would be. 22 MS. ALLEN: Okay. Could you state your name 23 for the court reporter please?

1 Arnold Bandstra, MR. BANDSTRA: 2 B-A-N-D-S-T-R-A. Okay. It would seem possible and yet 3 some of the costs associated with Alternative 4 might 4 still be there, I don't know, if you had a deed 5 restriction. I don't know if you have to go through 6 the legal things you do to put a deed restriction if 7 the land was sold to whoever, given to the City for the City's control, and then it would really be up to the 8 City Building Department to make sure they never 9 10 allowed a building permit on it, which maybe that 11 wouldn't have as high of legal costs as actually going 12 through a deed restriction. Would that be less -- I'm 13 thinking less cost to society. The other thing that 14 you don't get with that is beneficial use of the 15 property. You have a person or persons who own the 16 And so you're in a sense trampling on their property. 17 rights by taking the property away from them not giving 18 them the opportunity to use it, if they were -- if they 19 found Alternative 4 to be acceptable. So there's, you 20 know, those ramifications of going that way. Is cost 21 the primary criteria? Would it be cheaper just to 22 purchase it and take it out of circulation as a usable 23 property than to go through the deed restriction? Ι

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1 don't know all the legal ramifications of that. 2 MR. RUNYON: Has the City ever sold a piece of 3 property that it owned? 4 MR. BANDSTRA: Yes. So would that still 5 require the deed restriction part of it? 6 MR. RUNYON: Yeah, that's --7 MR. BANDSTRA: It seems like it might. And the 8 other thing is I think just in practice -- I don't want 9 to say this officially because I don't know if I can, 10 but it seems like the City does not make a practice of 11 condemning property. They don't want to. It's a very 12 rare thing to do in Ottawa. And so, you know, that has 13 political ramifications and all of that that, you know, 14 they generally don't want to go towards. 15 Thank you. Any other comments? MS. ALLEN: 16 MR. BANDSTRA: You look like you're wanting to 17 make a comment. 18 MR. RUNYON: I would have to say -- you know, 19 and I'll say this from me personally, not the agency 20 necessarily. You know, there's some residual 21 contamination below the water table on this property. 22 Eighteen picocuries per gram, which was the peak sample 23 concentration, is a fraction of what you produce in

1 your local water treatment plant. 2 MR. BANDSTRA: You mean as far as the filtrate? 3 The concentrate? The discharge? 4 MR. RUNYON: It's a fraction of the 5 concentration that you probably have in your water 6 treatment sludge. I think it's -- I don't think it's 7 the right perspective that the property is somehow not 8 at all useful --9 MR. BANDSTRA: Right. 10 MR. RUNYON: -- because --11 MR. BANDSTRA: It's a low level. 12 MR. RUNYON: -- there's a low level of radium 13 contamination underneath the water table four to six 14 feet below the surface. 15 MR. BANDSTRA: Right. 16 MR. RUNYON: I think the properly is -- you 17 know, it is just as useful as it would be otherwise, 18 and I think we need to be careful not to give the wrong 19 impression that because, you know, under the 20 circumstances now -- you know, when there was high 21 activity contamination very near the surface 22 surrounding the house that was previously there and, 23 you know, before all the material was removed that was

removed in the '95, '96 remedial action, you couldn't have used it.

3 MR. BANDSTRA: Right.

MR. RUNYON: The condition right now -- you MR. RUNYON: The condition right now -- you know, I just -- I don't want -- I don't think everybody should walk away with the perspective that because there's residual radium contamination that the property is of no value.

9 MR. BANDSTRA: Yeah, I don't want to imply that 10 either because the level is low. The assessment of 11 health risk has all been determined as very low, and 12 with the proper, you know, measures taken, it should 13 not be a hazard.

MR. RUNYON: And if I put on the City of Ottawa hat, which I mean I can't wear officially, but I would say, you know, I would rather have somebody develop that property with the proper type of structure and take taxes on it --

MR. BANDSTRA: Right, increase the tax rolls
and be a productive piece of real estate.
MR. RUNYON: Than turn it into -MR. BANDSTRA: Grass.
MR. RUNYON: Yeah. I mean, it's a pretty

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¹ little, you know, lot there.

| 2 | MR. BANDSTRA: It backs up to Goose Creek. |
|----|---|
| 3 | MR. RUNYON: Yeah. Under the current risk |
| 4 | scenarios they are not any different than background. |
| 5 | MS. ALLEN: Okay. If there are no more |
| 6 | comments, I would like to reiterate that we want your |
| 7 | comments, and we encourage you to for people who did |
| 8 | not attend the meeting tonight to encourage them to |
| 9 | send in their comments as well. I have some extra fact |
| 10 | sheets that you can pass on to people. All of the |
| 11 | information on the site is located in the information |
| 12 | repository which is listed on the fact sheet as the |
| 13 | Reddick Library. So if you want to go and look at more |
| 14 | documents, we have it on disk. So with that if there |
| 15 | are no more comments, we'll close the meeting and thank |
| 16 | you all for coming. |
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1 STATE OF ILLINOIS)

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2 COUNTY OF GRUNDY)

3 I, Belinda A. Harr, CSR No. 84-003215, do hereby 4 certify that the above-captioned proceeding was 5 recorded stenographically by me and reduced to 6 typewriting under my personal direction; and that the 7 foregoing is a true and correct transcript of the 8 proceedings had at the time and place previously 9 specified. 10 IN WITNESS WHEREOF I have hereunto 11 set my hand this 5th day of June, 2010. 12 13 14 15 16 17 18 Certified Shorthand Reporter 19 20 21 22 23